



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,732	10/11/2001	Richard A. Shields	060783/P010US/10104632	9386

29053 7590 09/23/2005

DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P.
2200 ROSS AVENUE
SUITE 2800
DALLAS, TX 75201-2784

EXAMINER

PHAN, HUY Q

ART UNIT

PAPER NUMBER

2687

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,732

Applicant(s)

SHIELDS ET AL.

Examiner

Huy Q. Phan

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-22 and 35-52 is/are allowed.
6) ☒ Claim(s) 23-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on date: 08/17/2005.
Claims 1-52 are still pending.

Response to Arguments

2. Applicant's arguments with respect to claims 23-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 23 is objected to because of typographical errors. In claim 23, line 6, the term "mean" should be changed to - -means- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 23-27 and 29-31 are rejected under 35 U.S.C. 102(a) as being anticipated by Spano et al. (US-6,195,060).

Regarding claim 23, Spano et al. disclose a wireless RF data communication system subscriber station (figs. 2-5 and descriptions) comprising:

means for RF communication of said data (fig. 2 and description on col. 6, lines 56-67);

means for forming at least one antenna beam (fig. 2, antenna 62), said antenna beam forming means operatively connected to said communication means to communicate said RF data (fig. 2 and description on col. 6, lines 56-67);

means for enclosing said RF communication means to shield emissions from and to said antenna beam forming means, said antenna beam forming means mounted to said enclosing means (fig. 2, 42 and col. 5, lines 31-65);

means for housing said enclosing means and said antenna beam forming means mounted thereto, said housing means comprising means for covering said antenna beams means, while allowing communication on said antenna beams (fig. 2, 32 and col. 4, lines 16-33);

means for controllably rotatably mounting said housing means (col. 4, lines 3-7 and col. 4, line 34-col. 6, line 27); and

means for aiming said at least one antenna beam to compensate for interference (col. 4, lines 3-7 and col. 6, lines 7-67).

Regarding claim 24, Spano et al. disclose the subscriber station of claim 23 wherein said beam forming means comprises means for forming a plurality of antenna beams (col. 4, lines 3-7).

Regarding claim 25, Spano et al. disclose the subscriber station of claim 23 further comprising means for aiming said antenna beam forming means by controlling rotation of said mounting means (col. 4, lines 3-7 and col. 6, lines 7-67).

Regarding claim 26, Spano et al. disclose the subscriber station of claim 25 wherein said aiming means is disposed within said housing means (figs. 2-5 and descriptions).

Regarding claim 27, Spano et al. disclose the subscriber station of claim 23 further comprising means for converting analog RF signals to digital signals and digital signals to analog RF signals, said converting means mounted to an opposite side of said enclosing means from said antenna beam forming means (fig. 2 and description on col. 6, lines 56-67).

Regarding claim 29, Spano et al. disclose the subscriber station of claim 23 further comprising means for filtering said RF communication of data (col. 7, lines 16-21).

Regarding claim 30, Spano et al. disclose the subscriber station of claim 29 wherein said filtering means comprise at least one surface acoustical wave filter (col. 7, lines 26-30).

Regarding claim 31, Spano et al. disclose the subscriber station of claim 29 wherein said filtering means comprises at least one finite impulse response filter (col. 7, lines 11-59).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spano et al. in view of Walton (US-6,064,344).

Regarding claim 32, Spano et al. disclose the subscriber station of claim 23. But, Spano et al. do not particularly show means for allowing moisture to escape said housing means; and means for preventing moisture infiltration into said housing means. However in analogous art, Walton teaches "the satellite antenna 102 is equipped with a cover 112 that is made from a breathable material that allows air to travel through the material but generally prevents water from travelling through the material. The cover in this embodiment is preferably made of a non-laminated Gortex material sold by WL Gore, preferably under the order no. of RA-7941. The material comprising the cover 112 in this embodiment is adapted to allow air to travel from the space 111 to the outer surface of the cover 112 but generally prevent liquid water from travelling through to the

space 111" (see col. 9, lines 23-35). Since, Spano et al. and Walton are related to the antenna system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Spano et al. as taught by Walton in order to "reduce the accumulation of non-frozen moisture, such as rain or moisture resulting from high humidity" (see Walton's specification col.9).

Claims 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spano et al. in view of Patel (US-5,828,339).

Regarding claims 28 and 33, Spano et al. disclose the subscriber station of claim 23. But, Spano et al. do not particularly show wherein said enclosing means further comprises means for dissipating heat produced by said RF communication means; and wherein said enclosing means further comprises means for dissipating heat from said RF communication means. However in analogous art, Patel teaches the whole of the rear cover could be made of metal, for example, a cast aluminum alloy including the heat sink fins 256 and possibly the bracket 204....To increase the heat transfer from the electronic components to the heatsink, the heatsink can be provided with internal pedestals 254 for contacting the circuits, or the circuit boards, directly (see col. 11, lines 21-50). Since, Spano et al. and Patel are related to the antenna system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Spano et al. as taught by Patel "advantageous where a lot of heat is generated from the electronic components or when the antenna is used in

warm environments, in order to avoid overheating of the components within the sealed unit" (see Patel's specification col.11).

Regarding claim 34, Spano et al. and Patel disclose the subscriber station of claim 33. Patel further discloses wherein an interior of said housing means comprises means for absorbing heat from within said housing means for dissipation out of said housing means (see col. 11, lines 21-50).

Reasons for Allowance

6. Claims 1-22 and 35-52 are allowed.

The following is a statement of reason for the indication of allowance:

As the applicant stated in the remarks (page 12-21) of the amendment filed on 08/17/2005.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

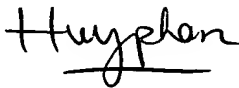
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 571-272-7924. The examiner can normally be reached on 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G Lester can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SONNY TRINH
PRIMARY EXAMINER

Examiner: Phan, Huy Q.

AU: 2687

Date: 09/14/2005